

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 09/719,389
Applicant : David Holliday et al.
Filed : 06-25-2001
TC/A.U. : 2424
Examiner : Farzana E. Hossain
Docket No. : 2365-105
Customer No. : 6449
Confirmation No. : 8225

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 41.37

MAIL STOP – Appeal Brief -- Patents

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

The following comprises the Appellants' Brief on Appeal from the rejection, dated June 18, 2008, of claims 1-18 and 22-40 (now twice-rejected). This Brief is accompanied by the required appeal brief fee set forth in 37 C.F.R. § 41.20(b)(2) and is timely filed on December 9, 2008, within two months of the October 20, 2008 Notice of Appeal.

I. REAL PARTY IN INTEREST

The real party in interest is British Sky Broadcasting Limited.

II. RELATED APPEALS AND INTERFERENCES

There are no other prior or pending appeals, interferences or judicial proceedings known to Appellants, the Appellants' legal representative, or assignee which may be related to, directly affect or be directly affected by, or have a bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1-18 and 22-40 are pending and are rejected. Claims 19-21 have been cancelled.

IV. STATUS OF AMENDMENTS

On November 19, 2008, Applicant filed an Amendment after Appeal Under 37 C.F.R. 41.33(a) to amend dependent claim 15 by changing the term “filtered schedule” to “sorted schedule”. This amendment was made address the objection to claims 15 stated in the Office Action of June 18, 2008 and to conform claim 15 to the terminology assumed in the Office Action and to place the claims in better condition for consideration on appeal. An Advisory Action issued on December 4, 2008 indicating that the amendment was entered and did overcome the objection to claim 15.

V. SUMMARY OF CLAIMED SUBJECT MATTER

Independent Claim 1:

The subject matter of claim 1 embodies a receiver (3) (Figs. 1, 2; page 8, lines 14-15) for receiving television signals in a plurality of channels including compressed program schedule data (page 1, line 15 - page 2, line 9) and for outputting signals defining an image of the broadcast events in the program schedule for display on a television screen (2). (Figs. 1, 2; page 10, lines 13-16).

The receiver includes “means for receiving data defining two versions of a dictionary representing text portions,” a means plus function clause under 35 U.S.C. 112(6). The structure corresponding to the “means for receiving” includes a processor (23) that is responsive to control signals from a remote control unit (28), data included in the signal received by the dish antenna (4), and data stored in the memory units (25-27). (Fig. 2; page 11, lines 6-9; page 15, lines 15-22). Two versions of the dictionary are normally transmitted. (page 16, lines 6-8).

The receiver further includes “means for expanding the programme schedule data by identifying corresponding text portions in the dictionary,” a means plus function clause under 35 U.S.C. 112(6). The structure corresponding to the “means for expanding” includes the processor (23) executing software configured for using compressed strings transmitted with the signal to look up the complete text in the appropriate dictionary and to reconstruct the full text of the page. (page 15, lines 15-17; page 17, lines 4-7).

The receiver further includes “means for determining in which version of the dictionary the corresponding text portion is stored,” a means plus function clause under 35 U.S.C. 112(6). The structure corresponding to the “means for determining” includes the processor (23) executing software which stores only one version of the dictionary at a time, e.g., information relating to the present week’s programming or the next week’s programming, and determines, each time the dictionary is broadcast, the appropriate dictionary, e.g., this week’s or next week’s, and looks up the complete text in the appropriate dictionary. (page 16, lines 11-19; page 17, lines 6-7). The appropriate dictionary is determined from the compressed text string (60), which includes a version identification field (61). (Fig. 4; page 16, lines 2-3).

The receiver further includes “means for constructing the image of events using the identified corresponding text portions,” a means plus function clause under 35 U.S.C. 112(6). The structure corresponding to the “means for constructing” includes the processor (23) executing software which looks up a complete string of text corresponding to the compressed text (62) of the compressed text string (61). (Fig. 4; page 16, lines 3-5; page 17, lines 5-7).

The receiver includes “means for storing only the most recently accessed version of the dictionary,” a means plus function clause under 35 U.S.C. 112(6). The structure corresponding to the “means for storing” includes the processor (23) executing software configured to store in memory, e.g., RAM 26 (Fig. 2; page 15, line 17) the most recently accessed dictionary. (page 16, lines 15-16).

Dependent Claims 4 and 23-25

Claim 4 depends directly from claim 1, and claims 23, 24, and 25 depend indirectly from claim 1 via intermediate claims 2, 3, and 22 respectively. These claims recite that the text portions comprise a short event name. (page 17, lines 8-13).

Independent Claim 9:

The subject matter of independent claim 9 embodies a receiver (3) (Figs. 1, 2; page 8, lines 14-15) for receiving television signals in a plurality of channels including compressed program and other services provided by a broadcaster. (page 1, line 15 - page 2, line 9).

The receiver of claim 9 includes “means for storing a reference channel set identity and one or more reference channel subset identities,” a means plus function clause under 35 U.S.C. 112(6). The structure corresponding to the “means for storing” includes the processor (23) executing software for storing – on, e.g., memory (25), (26), and/or (27) – a reference channel identity, e.g., a bouquet identity (70), and one or more reference channel subset identities, e.g., one or more sub-bouquets (71) – (75). (Figs. 2, 5; page 18, lines 7-16).

The receiver of claim 9 further includes “means for comparing the channel identity and channel subset identity for a channel in a received signal with the reference channel and channel subset identities,” a means plus function clause under 35 U.S.C. 112(6). The structure corresponding to the “means for comparing” includes the processor (23) executing software configured to receive and store bouquet and sub-bouquet ID's corresponding to the subscriber's location, and this information may stored on a viewing card. (page 18, line17 – page 19, line 3). The receiver/decoder further includes a conditional access control circuit (16) which uses data stored on the viewing card (e.g., smart card (16a)) to determine whether the viewer can access a particular channel. (Fig. 2; page 9, lines 8-11).

The receiver of claim 9 further includes “means for outputting the received television signal for display of the programme or other services defined thereby depending on the comparison,” a means plus function clause under 35 U.S.C. 112(6). The structure corresponding to the “means for storing” includes the processor (23) executing software configured to output the signal for display if the viewer is authorized to access the particular channel. (Fig. 2; page 9, lines 8-11).

Claims 12 and 27-29

Claim 12 depends directly from independent claim 9, and claims 27, 28, and 29 depend indirectly from claim 9 via intermediate claims 10, 11, and 26 respectively. These claims recite that each channel number has an associated order channel number which varies on a channel subset basis, and the receiver comprises means for displaying lists depending on order channel number. The structure corresponding to the “means for displaying” includes processor (23) executing software configured to read attributes given to services on a sub-bouquet basis,

wherein the order number is used to define the order in which services appear in the EPG grid and listings. (page 19, lines 16-22).

Claims 13, 30, 31, and 33

Claim 13 depends directly from independent claim 9, and claims 30, 31, and 33 depend indirectly from claim 9 via intermediate claims 10, 11, and 26 respectively. These claims recite that each channel includes one or more indicators, and the receiver comprises means responsive to the indicators for controlling display of information. The structure corresponding to the “means responsive to the indicators” includes processor (23) executing software configured to read attributes given to services on a sub-bouquet basis including navigation and display indicators. (page 20, lines 1-6).

Independent Claim 14:

The subject matter of independent claim 14 embodies a receiver (3) (Figs. 1, 2; page 8, lines 14-15) for receiving television signals in a plurality of channels. The signals include sorting data defining a sorted list and scheduling data defining a schedule of programme events. (page 20, lines 8-9).

The receiver of claim 14 further includes “means for sorting the scheduling data depending on the sorting data to produce output signals defining an image of selected events in the programme schedule for display as a sorted schedule on a television screen in an order depending on the sorted list,” a means plus function clause under 35 U.S.C. 112(6). The structure corresponding to the “means for sorting” includes the processor (23) executing software configured to compute index lists of events sorted by sorting data, such as time or alphabetically, at the head end and to send the sorted index lists over the air. (page 20, lines 13-14). Using these index lists, the software is able to display the programs in a sorted format by starting time order or by alphabetic order by title. (Fig. 6; page 20, lines 15-18; page 26, lines 10-13).

Independent Claim 16:

The subject matter of independent claim 16 embodies a receiver (3) (Figs. 1, 2; page 8, lines 14-15) for receiving television signals in a plurality of channels. The channels are broadcast in a first broadcast network, such as a digital satellite television network, including programme schedule data for the first network (such as a separate electronic program guide (“EPG”) for the satellite network), and the channels are broadcast in a second broadcast network, such as a terrestrial broadcast, that includes programme schedule data for the second network (such as a separate EPG for the terrestrial network). (page 21, lines 8-14). Programme schedule data is broadcast in the first network (e.g., the digital satellite television network) at a faster rate than in the second network (e.g., the digital terrestrial television network).

The receiver includes a cache store (26a) for storing a portion of programme schedule data for the first and/or the second network transmitted from time to time in at least one of the channels broadcast in the first network and/or the second network. In one embodiment, the satellite EPG is configured to cache data as and when required, taking information from the EPG transponder of the satellite network. (page 21, lines 15-17). In another embodiment, the full schedule is “trickle” transmitted for the terrestrial network and the complete schedule is stored in the receiver’s cache memory. (Fig. 2; page 22, lines 3-6). In still another embodiment, sections of the schedule are obtained as required from the fast continuous transmission on the EPG transponder of the satellite service, and the schedule for the terrestrial listings schedule are also transmitted in the data transmitted on the satellite EPG transponder. (page 22, line 22 – page 23, line 4).

The receiver of claim 16 further includes “means for decoding the data in the cache store for display of a programme schedule of the first or second broadcast network,” a means plus function clause under 35 U.S.C. 112(6). The structure corresponding to the “means for decoding” includes the processor (23) executing software configured to access data stored in the cache RAM (26a) and decompress the data using video decompression and processing circuit (18), which sends the signal to the television (2). (Fig. 2).

The receiver of claim 16 further includes “means for receiving and decoding additional programme schedule data from the first network for either of the first or second broadcast network, in response to a user request,” a means plus function clause under 35 U.S.C. 112(6).

The structure corresponding to the “means for receiving and decoding” includes the processor (23) executing software configured to obtain sections of the schedule as required from the fast continuous transmission on the EPG transponder of the satellite service, which will also include the schedule for the terrestrial listings schedule. (page 22, line 22 – page 23, line 9). Thus, a receiver/decoder (e.g., a satellite capable box) will obtain its schedule from the first network (e.g., the satellite EPG transponder) for either the first or second network (e.g., the satellite or terrestrial network) on demand and only caches the piece of the schedule currently in use (i.e., requested by the user). (page 23, lines 5-9).

Claims 32 and 34-36

Claim 32, 34, 35, and 36 depend indirectly from independent claim 9 via intermediate claims 12, 27, 28, and 29 respectively. These claims recite that each channel includes one or more indicators, and the receiver comprises means responsive to the indicators for controlling display of information. The structure corresponding to the “means responsive to the indicators” includes processor (23) executing software configured to read attributes given to services on a sub-bouquet basis including navigation and display indicators. (page 20, lines 1-6).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- A. Whether the specification is objectionable as failing to provide antecedent basis for the claimed subject matter under 37 C.F.R. 1.175(d)(1).
- B. Whether claims 9-11 and 26 are unpatentable under 35 U.S.C. § 102(e) as being anticipated by Eyer et al. (U.S. 6,160,545).
- C. Whether claims 14, 15, and 40 are unpatentable under 35 U.S.C. § 102(e) as being anticipated by Ellis (U.S. 2007/0271582).
- D. Whether claims 1-3, 5-8, 22, 38 and 39 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Ellis et al. (U.S. 5,548,338) in view of Keith et al. (U.S. 5,991,451).

- E. Whether claims 4 and 23- 25 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Ellis '338 in view of Keith '451 and further in view of Terasawa et al. (U.S. 6,147,714).
- F. Whether claims 12, 27-29 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Eyer '545 in view of Klosterman (U.S. 6,072,983).
- G. Whether claims 13, 30, 31 and 33 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Eyer '545 in view of Coleman et al. (U.S. 5,844,620).
- H. Whether claims 16-18 and 37 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Usui et al. (U.S. 5,808,694) in view of Yuen (WO 97/47136) and Eyer '545.
- I. Whether claims 32 and 34-36 are unpatentable under 35 U.S.C. § 103(a) as being obvious over Eyer '545 in view of Klosterman '983, and further in view of Coleman '620.

VII. ARGUMENT

A. The specification provides adequate antecedent basis for the claimed subject matter under 37 C.F.R. 1.175(d)(1).

The Examiner contends that the specification fails to provide proper antecedent basis for “receiving programme schedule data broadcast in the first network at a faster rate than in the second network” as recited in independent claim 16. (Office Action, p. 5, ¶ 6).¹ Appellants respectfully submit that the objection is in error.

An applicant is not required to use in his claims the identical language that is used in his specification or in his original disclosure. It is merely necessary that the

The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. 37 C.F.R. 1.175(d)(1).

¹ Unless otherwise specified, references to “Office Action” are to the Office Action of June 18, 2008.

The phrase “receiving programme schedule data broadcast in the first network at a faster rate than in the second network” conforms to the original disclosure and is clearly supported by the original description.

Original claim 16, which is part of the original disclosure, introduced a “first broadcast network” and a “second broadcast network” and further specified that one network is faster than the other one. However, the original claim did not include any feature that distinguished the “one” network from the “other” network, other than requiring them to be different. In other words, “one network” and the “other network” were arbitrary labels conferring no particular limitation. One network being faster than the other network provides only two possibilities; either the one network – or the first network – is faster or the other network – or the second network – is faster.

The meaning of the phrase “receiving programme schedule data broadcast in the first network at a faster rate than in the second network” would be readily ascertainable by reference to the original disclosure, and thus the original disclosure does provide proper antecedent basis for the phrase.

Accordingly, Appellants respectfully request that the objection to the specification be reversed.

B. Claims 9-11 and 26 are not anticipated by Eyer et al. (U.S. 6,160,545).

The Examiner has rejected claims 9-11 and 26 under 35 U.S.C. § 102(e), as being anticipated by Eyer et al. (U.S. 6,160,545). (Office Action, pp. 6-7, ¶ 9). The Examiner contends that Eyer et al. '545 discloses all of the elements of claims 9-11 and 26. Appellants respectfully submit that the Examiner is in error in this rejection.

The Examiner identifies the 'preferred source' data bit of Eyer (col. 7, lines 31 to 40), as the 'channel subset identity' in claim 9. Appellants disagree. Eyer '545 does not disclose

means for comparing the channel identity and channel subset identity for a channel in a received signal with the reference channel and channel subset identities and means for outputting the received

television signal for display of the programme or other services defined thereby depending on the comparison

The structures corresponding to the “means for comparing” and the “means for outputting” include the processor (23) executing software configured to receive and store bouquet and sub-bouquet ID's corresponding to the subscriber's location (page 18, line17 – page 19, line 3) and software configured to output the signal for display if the viewer is authorized to access the particular channel. (page 9, lines 8-11).

In evaluating the patentability of a “means-plus-function” clause, the PTO must consider the structure described in the applicant's specification that corresponds to the recited means. See 35 U.S.C. §112(6); In re Donaldson, 16 F.3d 1189, 1195; 29 USPQ2d 1845 (Fed. Cir. 1994) (holding that when considering a claim language written in means-plus-function format under 35 U.S.C. §112(6), “the PTO may not disregard the structure disclosed in the specification corresponding to such language when rendering a patentability determination.”).

Eyer '545 does not disclose structure corresponding to the “means for comparing” and the “means for outputting.” Instead, the integrated receiver-decoder (“IRD”) of Eyer '545 uses the 'preferred source' data bit to resolve clashes between duplicative channels, by selecting the channel indicated as the preferred source.

For example, a “preferred source” data bit which is delivered to the IRDs can indicate which cable channels are preferred sources with a “1”, while non-preferred cable channels are designated with a “0”. Thus, if the duplicative channel “CNN” is received via both the satellite network and the CATV network, and the CATV channel is designated as a preferred source, the CATV channel will be displayed when selected by the user in lieu of the satellite channel. The “CNN” service carried on satellite will not be accessible by the user, even though it is available to the IRD's tuner/demodulator.

(Eyer '545, col. 7, lines 31-41). If there is no clash, then the IRD will not pay attention to the 'preferred source' data bit. In other words, Eyer does not store the value '1' as a channel subset identity and decide whether to output a channel based on whether the preferred source data bit is '1'.

Claims 10-11 and 26 depend directly or indirectly from claim 9 and thus incorporate all limitations of claim 9.

Accordingly, Appellants submit that the subject matter of claims 9-11 and 26 is not anticipated by Eyer '545. Reversal of this rejection is respectfully requested.

C. Claims 14, 15, and 40 are not anticipated by Ellis (U.S. 2007/0271582) ("Ellis 2").

The Examiner has rejected claims 14, 15, and 40 under 35 U.S.C. § 102(e), as being anticipated by Ellis (U.S. 2007/0271582) ("Ellis 2") (Office Action, p. 8, ¶ 10). The Examiner contends that Ellis 2 discloses all of the elements of claims 14, 15, and 40. Appellants submit that the Examiner is in error in this rejection.

Claim 14 requires that a receiver receives "signals [including] sorting data defining a sorted list," and then display a programme schedule in an order depending on the sorted list. Moreover, the structure corresponding to the "means for sorting" includes the processor (23) executing software configured to compute index lists of events sorted by sorting data, such as time or alphabetically, at the head end and to send the sorted index lists over the air. (page 20, lines 13-14).

Ellis 2 does not anticipate claim 14 because it does not disclose the structure corresponding to the "means for sorting." See In re Donaldson, *supra*.

In Ellis 2, a user may create a profile containing attributes of preferred programming and the user may specify a priority or sort order in which programs satisfying the preference criteria in a profile are displayed or tuned to:

[0075] The preference attributes the user selects may be organized in a profile (sometimes called a preference profile or a favorites profile). If there are several users (e.g., different family members) associated with a given program guide, each user may have his own profile. A profile may contain more than one preference attribute of the same type. For example, preference profile 80 of FIG. 3 has three series preference attributes (series Nos. 1, 2, and 3), four genre preference attributes (movies, game shows, news, baseball, and comedy), and two actor preference attributes (John Wayne and Arnold Schwarzenegger).

[0076] If desired, the user may specify a priority or sort order in which programs satisfying the preference criteria in a profile are to

be displayed or tuned to. When listing or tuning to programs that satisfy a profile, the programs matching the highest priority preference attributes may be tuned to (with set-top box 44) or listed (on the display of television 48) first. This feature is particularly useful when a user wishes to further simplify the process of selecting programs of interest.

Ellis 2, page 4. Thus, Ellis 2 describes that the program listings may be sorted according to a user-defined priority or sort order for programs satisfying the preference criteria in the user's profile. There is no disclosure in Ellis 2 of *receiving* a sorted list, nor is there disclosure of a processor executing software configured to compute index lists of events sorted by sorting data at the head end and to send the sorted index lists over the air.

Claims 15 and 40 depend directly or indirectly from claim 14 and thus incorporate all limitations of claim 14.

Accordingly, Appellants submit that the subject matter of claims 14, 15, and 40 is not anticipated by Ellis 2. Reversal of this rejection is respectfully requested.

D. Claims 1-3, 5-8, 22, 38 and 39 are not obvious over Ellis et al. (U.S. 5,548,338) in view of Keith et al. (U.S. 5,991,451).

The Examiner has rejected claims 1-3, 5-8, 22, 38 and 39 under 35 U.S.C. § 103(a), as being obvious over Ellis et al. (U.S. 5,548,338) in view of Keith et al. (U.S. 5,991,451). (Office Action, pp. 9-12, ¶ 12). The Examiner acknowledges that Ellis '338 does not disclose means for receiving two versions of a dictionary, means for determining in which version of the dictionary the corresponding data is stored, or means for storing the most recently accessed version of the dictionary (Office Action, p. 9-10, ¶ 12), but contends that it would have been obvious to one of ordinary skill in the art to modify Ellis to include these features based on the teachings of Keith. (Office Action, p. 10, ¶ 12). Appellants respectfully disagree.

The structure corresponding to the means for receiving" includes a processor (23) that is responsive to control signals from a remote control unit (28), data included in the signal received by the dish antenna (4), and data stored in the memory units (25-27). (Fig. 2; page 11, lines 6-9; page 15, lines 15-22). Two versions of the dictionary are normally transmitted. (page

16, lines 6-8).

The structure corresponding to the “means for determining” of claim 1 includes the processor (23) executing software which stores only one version of the dictionary at a time, e.g., information relating to the present week’s programming or the next week’s programming, and determines, each time the dictionary is broadcast, the appropriate dictionary, e.g., this week’s or next week’s, and looks up the complete text in the appropriate dictionary. (page 16, lines 11-19; page 17, lines 6-7). The appropriate dictionary is determined from the compressed text string (60), which includes a version identification field (61). (Fig. 4; page 16, lines 2-3).

Further, the structure corresponding to the “means for storing” includes the processor (23) executing software configured to store in memory the most recently accessed dictionary. (page 16, lines 15-16).

Thus, two versions of the dictionaries are received, the version corresponding to the text portion is determined, and only one version – the most recently accessed version – is stored.

Ellis ‘338 and Keith ‘541 do not render claim 1 obvious because they do not disclose the structure corresponding to the “means for determining” or the “means for storing.” See In re Donaldson, supra.

Keith discloses that multiple codes are stored simultaneously, to enable code swapping:

Another situation is where the encoder and decoder are explicitly preprogrammed with two or more different huffman tables. In this case, the bitstream identifies the huffman table (e.g., by a table number) as well as any changes to that table.

Keith ‘541, col. 8, lines 20-24. Further, Keith merely describes that the updated Huffman table is used to encode data (Id. col. 7, lines 40-42), but the updated table is not *necessarily the most recently accessed* dictionary, as required by the “means for storing” limitation.

Hence, Keith teaches away from *using* two versions and *storing* only the most recently used version. The Examiner contends that claim 1 does not *require* using both versions of the dictionaries. (Office Action, p. 2, ¶ 2). Appellants respectfully disagree. First, claim 1 includes “means for receiving data defining two versions of a dictionary” Further, claim 1 includes “means for determining in *which* version of the dictionary the corresponding text

portion is stored” (emphasis added). Unless *both* versions were being used, it would not be necessary to determine *which* version is the correct one.

Claims 2, 3, 5-8, 22, 38, and 39 depend from claim 1 and thus incorporate all limitations of claim 1.

Accordingly, Applicants submit that the subject matter of claims 1-3, 5-8, 22, 38 and 39 are not rendered obvious by Ellis ‘338 in view of Keith ‘541. Reversal of this rejection is requested.

E. Claims 4 and 23- 25 are not obvious over Ellis ‘338 in view of Keith ‘451 and further in view of Terasawa et al. (U.S. 6,147,714).

The Examiner has rejected claims 4 and 23- 25 under 35 U.S.C. § 103(a), as being obvious over Ellis ‘338 in view of Keith ‘451 and further in view of Terasawa et al. (U.S. 6,147,714). (Office Action, p. 12, ¶ 13). The Examiner contends that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination to include the text portions comprise a short event name . . . as taught by Terasawa in order to provide a succinct title to the user for easy selection as is well known in the art.” (*Id.*) Appellants submit that the Examiner is in error in this rejection.

Claim 4 and 23-25 depend, directly or indirectly, from claim 1. As detailed above, Ellis ‘338 and Keith ‘541 do not render obvious the subject matter of claim 1. Terasawa et al. does not cure the deficiencies of Ellis ‘338 and Keith ‘541. In particular, Terasawa ‘714 fails to disclose the structure corresponding to the “means for determining” or the “means for storing” which are lacking from Ellis ‘338 and Keith ‘541. Thus, the combination of Ellis ‘338, Keith ‘541, and Terasawa ‘714 does not render the claimed invention obvious.

Accordingly, Applicants submit that the subject matter of claims 4 and 23-25 are not rendered obvious by Ellis ‘338 in view of Keith ‘541, and further in view of Terasawa ‘714. Reversal of this rejection is requested.

F. Claims 12, 27-29 are not obvious over Eyer ‘545 in view of Klosterman (U.S. 6,072,983).

The Examiner has rejected claims 12, 27-29 under 35 U.S.C. § 103(a), as being obvious over Eyer '545 in view of Klosterman (U.S. 6,072,983). (Office Action, p. 12, ¶ 14). The Examiner contends that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eyer to include an order number for receiving program schedule information which is sorted in a predetermined order such that the program schedule is mixed, sorted, organized in a format . . . as taught by Klosterman so that the program schedule is ready for immediate display and saves time . . . as disclosed by Klosterman." (*Id.*) Appellants submit that the Examiner is in error in this rejection.

Claims 12 and 27-29 depend, directly or indirectly, from independent claim 9. As detailed above, Eyer '545 does not disclose structure corresponding to the "means for comparing" and the "means for outputting." Instead, the IRD of Eyer '545 uses the 'preferred source' data bit to resolve clashes between duplicative channels by selecting the channel indicated as the preferred source. If there is no clash, then the IRD will not pay attention to the 'preferred source' data bit. In other words, Eyer '545 does not store the value '1' as a channel subset identity and decide whether to output a channel based on whether the preferred source data bit is '1'. Klosterman '983 does not cure the deficiency of Eyer '545, because Klosterman does not disclose structure corresponding to the "means for comparing" and the "means for outputting." Thus, the combination of Eyer '545 and Klosterman '983 does not render the claimed invention obvious.

Accordingly, Appellants submit that the subject matter of claims 12 and 27-29 are not rendered obvious by Eyer '545 in view of Klosterman '983. Reversal of this rejection is requested.

G. Claims 13, 30, 31 and 33 are not obvious over Eyer '545 in view of Coleman et al. (U.S. 5,844,620).

The Examiner has rejected claims 13, 30, 31 and 33 under 35 U.S.C. § 103(a), as being obvious over Eyer '545 in view of Coleman et al. (U.S. 5,844,620). (Office Action, p. 13-14, ¶ 15). The Examiner contends that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eyer to include that each channel has associated

with it one or more indicators such as closed captions . . . theme categories . . . and rating/parental rating . . . , the receiver comprising means responsive to the indicator for controlling display of program as parental controls on the program . . . or to display closed captioning . . . as taught by Coleman in order to allow a user to obtain information relating to the provision of services over a network . . . as disclosed by Coleman.” (Office Action, p. 14, ¶ 15). Appellants submit that the Examiner is in error in this rejection.

Claims 13, 30, 31, and 33 depend, directly or indirectly, from independent claim 9. As detailed above, Eyer ‘545 does not disclose structure corresponding to the “means for comparing” and the “means for outputting.” Instead, the IRD uses the ‘preferred source’ data bit to resolve clashes between duplicative channels, by selecting the channel indicated as the preferred source. If there is no clash, then the IRD will not pay attention to the ‘preferred source’ data bit. In other words, Eyer ‘545 does not store the value ‘1’ as a channel subset identity and decide whether to output a channel based on whether the preferred source data bit is ‘1’. Coleman ‘620 does not cure the deficiency of Eyer ‘545, because Coleman ‘620 does not disclose structure corresponding to the “means for comparing” and the “means for outputting.” Thus, the combination of Eyer ‘545 and Coleman ‘620 does not render the claimed invention obvious.

Accordingly, Appellants submit that claims 13, 30, 31 and 33 are not rendered obvious by Eyer ‘545 in view of Coleman ‘620. Reversal of this rejection is requested.

H. Claims 16-18 and 37 are not obvious over Usui et al. (U.S. 5,808,694) in view of Yuen (WO 97/47136) and Eyer ‘545.

The Examiner has rejected claims 16-18 and 37 under 35 U.S.C. § 103(a), as being obvious over Usui et al. (U.S. 5,808,694) in view of Yuen (WO 97/47136) (“Yuen 2”) and Eyer et al. (Office Action, pp. 14-17, ¶16). The Examiner contends that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Usui to include the program schedule data broadcast over the first network at a faster rate than in the second network...as taught by Yuen 2 in order to send high speed data for the 150 or more channels to the user without a longer wait which is inconvenient to the user.” (Office Action, p.

16). The Examiner concludes, therefore, that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify means for receiving and decoding additional program schedule data from the signals for the network...as taught by Eyer in order to provide cost and bandwidth benefits for the receiver and memory management...as disclosed by Eyer.” (*Id.*) Appellants submit that the Examiner is in error in this rejection.

Usui ‘694, Yuen 2, and Eyer ‘545 do not render claim 16 obvious because they does not disclose the structure corresponding to the “means for receiving and decoding additional programme schedule data from the first network for either of the first or second broadcast network, in response to a user request.” See In re Donaldson, supra.

The structure corresponding to the “means for receiving and decoding additional programme schedule data from the first network,” includes the processor (23) executing software configured to obtain sections of the schedule as required from the fast continuous transmission on the EPG transponder of the satellite service, which will also include the schedule for the terrestrial listings schedule. (page 22, line22 – page 23, line 4). Thus, a receiver/decoder (e.g., a satellite capable box) will obtain its schedule from the first network (e.g., the satellite EPG transponder) for either the first or second network (e.g., the satellite or terrestrial network) on demand and only caches the piece of the schedule currently in use (i.e., requested by the user). (page 23, lines 5-9).

The Examiner acknowledges that Usui is silent with respect to “means for receiving and decoding additional programme schedule data from the first network for either the first or second broadcast network, in response to user request.” (Office Action at p. 15). The underlined portion of this limitation was not addressed in the Office Action. The Examiner contends this feature of the inventions – except for the underlined portion, which is not addressed – is taught in Eyer ‘545. Appellants respectfully disagree.

Neither Eyer ‘545 nor Usui ‘694 teaches a system that receives and caches program schedule data over first and second networks, the program schedule data for the first network being broadcast at a faster rate than the program schedule data for the second network, and further including an “on-demand” mode enabled by means for receiving and decoding additional program schedule data from the first network for either the first or second network in

response to a user request – as described in the specification at p. 22, line 21 through p. 23, line10.

Claims 17, 18, and 37 depend from claim 16 and therefore incorporate all limitations of claim 16.

Accordingly, Appellants submit that claims 16-18 and 37 are not rendered obvious by Usui '694 in view of Yuen 2 and Eyer '545. Reversal of this rejection is requested.

I. Claims 32 and 34-36 are not obvious over Eyer '545 in view of Klosterman '983, and further in view of Coleman '620.

The Examiner has rejected claims 32 and 34-36 under 35 U.S.C. § 103(a), as being unpatentable over Eyer et al. in view of Klosterman, and further in view of Coleman et al. (Office Action, pp. 17-18, ¶ 17). The Examiner contends that “it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Eyer in view of Klosterman to include that each channel has associated with it one or more indicators such as closed captions . . . theme categories . . . and rating/parental rating . . . , the receiver comprising means responsive to the indicator for controlling display of program as parental controls on the program . . . or to display closed captioning . . . as taught by Coleman in order to allow a user to obtain information relating to the provision of services over a network . . . as disclosed by Coleman.” (Office Action, p. 18, ¶ 17).

Claims 32 and 34-36 depend, directly or indirectly, from independent claim 9. As detailed above, Eyer '545 does not disclose structure corresponding to the “means for comparing” and the “means for outputting.” Instead, the IRD uses the 'preferred source' data bit to resolve clashes between duplicative channels, by selecting the channel indicated as the preferred source. If there is no clash, then the IRD will not pay attention to the 'preferred source' data bit. In other words, Eyer does not store the value '1' as a channel subset identity and decide whether to output a channel based on whether the preferred source data bit is '1'. Klosterman and Coleman et al. do not cure the deficiency of Eyer et al.

Accordingly, Appellants submit that claims 32 and 34-36 are not rendered obvious by Eyer et al. in view of Klosterman and further in view of Coleman et al. Reversal of this rejection is requested.

CONTINGENT AUTHORIZATION TO CHARGE DEPOSIT ACCOUNT

Unless a check for the present Brief on Appeal is submitted herewith for the fee required under 37 C.F.R. §§ 1.192(a) and 1.17(c), please charge said fee to Deposit Account No. 02-2135.

Respectfully submitted,

Date:

6/9/08

By



Richard Wydeven
~~Attorneys for Applicants~~
Registration No. 39,881
ROTHWELL, FIGG, ERNST & MANBECK, p.c.
Suite 800, 1425 K Street, N.W.
Washington, D.C. 20005
Telephone: (202)783-6040

VIII. CLAIMS APPENDIX

The following claims are involved in this appeal:

1: A receiver for receiving television signals in a plurality of channels each defining a television programme, wherein at least a signal in one of the channels includes compressed program schedule data defining broadcast events in the channels, and for producing output signals defining an image of the broadcast events in the programme schedule for displaying on a television screen, the receiver comprising:

means for receiving data defining two versions of a dictionary representing text portions,
means for expanding the programme schedule data by identifying corresponding text portions in the dictionary,
means for determining in which version of the dictionary the corresponding text portion is stored,
means for constructing the image of events using the identified corresponding text portions,
and
means for storing only the most recently accessed version of the dictionary.

2: A receiver as claimed in claim 1, wherein the text portions comprise an extended service description.

3: A receiver as claimed in claim 1, wherein the text portions comprise an event name.

4: A receiver as claimed in claim 1, wherein the text portions comprise a short event name.

5: A receiver as claimed in claim 1, wherein the text portions comprise an extended event description.

6: A receiver as claimed in claim 1, wherein the text portions comprise a special event message.

7: A receiver as claimed in claim 1, comprising means for receiving the data of the other version of the dictionary and means for replacing the data of the one version of the dictionary in the storing means with the data of the other version of the dictionary when the data for the text portion is determined to be stored in the other version of the dictionary.

8: A receiver as claimed in claim 1, further comprising means for storing a default dictionary.

9: A receiver for receiving television signals in a plurality of channels each defining a television programme and/or other services provided by a broadcaster, and a channel set identity and a channel subset identity for the channel, the receiver comprising means for storing a reference channel set identity and one or more reference channel subset identities, means for comparing the channel identity and channel subset identity for a channel in a received signal with the reference channel and channel subset identities and means for outputting the received television signal for display of the programme or other services defined thereby depending on the comparison.

10: A receiver as claimed in claim 9, wherein the storing means is arranged to store a common channel subset identifying programmes and/or other services receivable independent of the receivers location and a regional channel subset identifying programmes and/or other services receivable depending on the location of the receiver.

11: A receiver as claimed in claim 9, wherein each channel has associated with it a logical channel number which varies on a channel subset basis, the receiver comprising means for displaying a list of programmes and/or other services containing the logical channel number.

12: A receiver as claimed in claim 9, wherein each channel has associated with it an order channel number which vanes on a channel subset basis, the receiver comprising means for displaying a list of programmes and/or other services depending the order channel number.

13: A receiver as claimed in claim 9, wherein each channel has associated with it one or more indicators, the receiver comprising means responsive to the indicators for controlling display of programme and/or service information.

14: A receiver for receiving television signals in a plurality of channels each defining a television programme, wherein the signals include sorting data defining a sorted list and scheduling data defining a schedule of programme events, the receiver comprising:

means for sorting the scheduling data depending on the sorting data to produce output signals defining an image of selected events in the programme schedule for display as a sorted schedule on a television screen in an order depending on the sorted list.

15: A receiver as claimed in claim 14, wherein the sorting data includes data to enable events in the schedule defined by the schedule data to be selected for display in the sorted schedule depending on at least one of genre, sub-genre or market oriented data.

16: A receiver for receiving television signals in a first plurality of channels broadcast in a first broadcast network that include programme schedule data for the first network, for receiving television signals in a second plurality of channels broadcast in a second broadcast network that include programme schedule data for the second network, and for receiving programme schedule data broadcast in the first network at a faster rate than in the second network, the receiver comprising:

a cache store for storing a portion of programme schedule data for the first and/or the second network transmitted from time to time in at least one of the channels broadcast in the first network and/or the second network,

means for decoding the data in the cache store for display of a programme schedule of the first or second broadcast network, and

means for receiving and decoding additional programme schedule data from the first network for either of the first or second broadcast network, in response to a user request.

17: A receiver as claimed in claim 16, wherein the data stored in the cache store is updated when new data is transmitted in the first or second network.

Claim 18: A receiver as claimed in claim 16, wherein the broadcast programme schedule data comprises depth data for specific models of receiver, the receiver being arranged to receive depth data pertaining thereto, and the amount of data stored in the cache store is dependent on the depth data.

19-21: (Canceled).

22: A receiver as claimed in claim 2, wherein the text portions comprise an event name.

23: A receiver as claimed in claim 2, wherein the text portions comprise a short event name.

24: A receiver as claimed in claim 3, wherein the text portions comprise a short event name.

25: A receiver as claimed in claim 22, wherein the text portions comprise a short event name.

26: A receiver as claimed in claim 10, wherein each channel has associated with it a logical channel number which varies on a channel subset basis, the receiver comprising means for displaying a list of programmes and/or other services containing the logical channel number.

27: A receiver as claimed in claim 10, wherein each channel has associated with it an order channel number which varies on a channel subset basis, the receiver comprising means for displaying a list of programmes and/or other services depending the order channel number.

28: A receiver as claimed in claim 11, wherein each channel has associated with it an order channel number which varies on a channel subset basis, the receiver comprising means for displaying a list of programmes and/or other services depending the order channel number.

29: A receiver as claimed in claim 26, wherein each channel has associated with it an order channel number which varies on a channel subset basis, the receiver comprising means for displaying a list of programmes and/or other services depending the order channel number.

30: A receiver as claimed in claim 10, wherein each channel has associated with it one or more indicators, the receiver comprising means responsive to the indicators for controlling display of programme and/or service information.

31: A receiver as claimed in claim 11, wherein each channel has associated with it one or more indicators, the receiver comprising means responsive to the indicators for controlling display of programme and/or service information.

32: A receiver as claimed in claim 12, wherein each channel has associated with it one or more indicators, the receiver comprising means responsive to the indicators for controlling display of programme and/or service information.

33: A receiver as claimed in claim 26, wherein each channel has associated with it one or more indicators, the receiver comprising means responsive to the indicators for controlling display of programme and/or service information.

34: A receiver as claimed in claim 27, wherein each channel has associated with it one or more indicators, the receiver comprising means responsive to the indicators for controlling display of programme and/or service information.

35: A receiver as claimed in claim 28, wherein each channel has associated with it one or more indicators, the receiver comprising means responsive to the indicators for controlling display of programme and/or service information.

36: A receiver as claimed in claim 29, wherein each channel has associated with it one or more indicators, the receiver comprising means responsive to the indicators for controlling display of programme and/or service information.

37: A receiver as claimed in claim 17, wherein the broadcast programme schedule data comprises depth data for specific models of receiver, the receiver being arranged to receive depth data pertaining thereto, and the amount of data stored in the cache store is dependent on the depth data.

38: A receiver as claimed in claim 1, wherein the most-recently accessed version of the dictionary is stored in a volatile memory.

39: A receiver as claimed in claim 38, wherein the data defines a further dictionary that is stored in a non-volatile memory.

40: A receiver as claimed in claim 14, wherein the receiver further comprises means for filtering the schedule data such that the sorted schedule is displayed as a filtered schedule.

IX. EVIDENCE APPENDIX

There has been no evidence submitted to or entered by the examiner that is being relied upon by Appellants in this appeal.

X. RELATED PROCEEDINGS APPENDIX

There have been no decisions rendered by a court or the Board in any related proceedings.